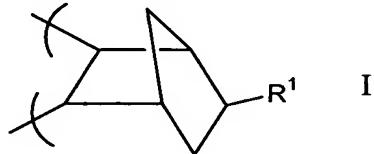


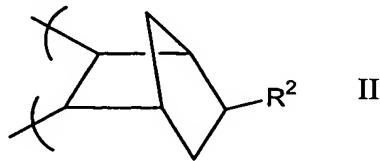
We Claim:

1. A composition comprising:
a polymer with a glass transition temperature greater than
250°C and a water absorption of 2% or less;
- 5 one or metals or metal compounds; and
an organic solvent.
2. The composition of claim 1 wherein the polymer is selected
from the group consisting of polynorbornene, polyarylate and mixtures
10 thereof.
3. The composition of claim 1 wherein the glass transition
temperature is greater than 290°C.
- 15 4. The composition of claim 1 wherein the glass transition
temperature is greater than 310°C.
5. The composition of claim 1 wherein the water absorption is
1% or less.
- 20 6. The composition of claim 3 wherein the water absorption is
1% or less.
7. The composition of claim 2 wherein the polymer is a
25 polynorbornene comprising molecular units of formula I



wherein R¹ is independently selected from hydrogen and a (C₁-C₁₀) alkyl.

8. The composition of claim 7 wherein the polymer is a polynorbornene that further comprises molecular units of formula II



wherein R^2 is a pendant group capable of participating in a cross-linking or network-forming reaction selected from the group comprising: epoxides, alcohols, silyl ethers, carboxylic acids, esters, and anhydrides; and the molar ratio of molecular units of formula II to formula I is greater than 0 to about 0.4.

10 9. The composition of claim 4 wherein the polymer is a polyarylate.

10. The composition of claim 1 wherein the polymer contains sites that can crosslink with one or more crosslinking agents.

15 11. The composition of claim 8 further comprising one or more crosslinking agents which includes polyhydroxystyrene.

12. The composition of claim 1 further comprising a metal adhesion promoter.

13. The composition of claim 12 wherein the metal adhesion promoter is selected from the group consisting of a phenoxy resin, polyhydroxyphenyl ether and 2-mercaptobenzimidazole.

25 14. The composition of claim 10 further comprising a hydroxyl-capping agent.

15. The composition of claim 14 wherein the hydroxyl-capping agent is a blocked isocyanate agent.

16. The composition of claim 1 wherein the composition is used to make an electronic component selected from resistors and discrete or planar capacitors.

5 17. The composition of claim 16 wherein the electronic component is a resistor with a percent resistance change of less than $\pm 5\%$ with respect to the relative humidity test

10 18. The composition of claim 17 wherein the resistor exhibits a percent resistance change of less than $\pm 1\%$ with respect to an ESD test.

19. The composition of claim 16 wherein the electronic component is a discrete or planar capacitor with a percent loss of less than 5%.

15 20. The composition of claim 1 wherein the composition is used to prepare a conductive adhesive.

21. The composition of claim 1 wherein the composition has a 20 cure temperature of less than 180°C or can be cured at a peak temperature up to about 270°C with a short infrared cure.

22. A composition comprising a polymer with a glass transition temperature greater than 250°C and a water absorption of 2% or less, and 25 an organic solvent.

23. The composition of claim 22 wherein the polymer is selected from the group consisting of polynorbornene, polyarylate and mixtures thereof.

30 24. The composition of claim 22 wherein the composition has a cure temperature of less than 180°C or can be cured at a peak temperature up to about 270°C with a short infrared cure, and the

composition is used as an encapsulant or an integrated circuit and wafer-level package selected from semiconductor stress buffers, interconnect dielectrics, protective overcoats bond pad redistribution, or solder bump underfills.

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25. A method of making a PTF resistor comprising:
combining a polymer with a glass transition temperature
greater than 250°C and a water absorption of less than 2%, one or metals
or metal compounds, and an organic solvent to provide a PTF resistor
10 composition;
applying the PTF resistor composition to a substrate; and
curing the applied PTF resistor composition.

26. The method of claim 25 wherein the polymer is selected from
15 the group consisting of polynorbornene, polyarylate and mixtures thereof.

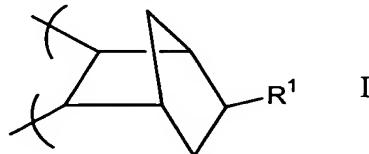
27. The method of claim 25 wherein the curing of the applied
PTF resistor composition includes a cure temperature of less than 180°C
or a peak temperature up to about 270°C with a short infrared cure.

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28. The method of claim 25 wherein the polymer has a glass
transition temperature that is greater than 290°C.

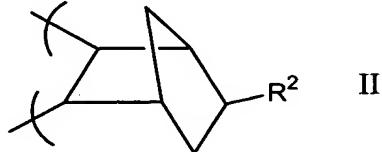
29. The method of claim 25 wherein the polymer has a water
25 absorption of 1% or less.

30. The method of claim 26 wherein the polymer is a
polynorbornene comprising molecular units of formula I



wherein R¹ is independently selected from hydrogen and a (C₁-C₁₀)alkyl.

31. The method of claim 30 wherein the polymer is a
5 polynorbornene that further comprises molecular units of formula II



wherein R² is a crosslinkable epoxy group, and the molar ratio of molecular units of formula II to formula I is greater than 0 to about 0.4.

10

32. The method of claim 26 wherein the polymer is a polyarylate.

33. An electronic component selected from the group consisting of PTF resistors and discreet or planar resistors, wherein the electronic
15 component comprises a cured composition prepared by a process comprising:

combining a polymer with a glass transition temperature greater than 250°C and a water absorption of 2% or less, one or metals or metal compounds, and an organic solvent to provide an uncured
20 composition;
applying the uncured composition to a substrate; and
curing the applied composition.